Quant:

1. If a number is divided by 24, the remainder is 21, then the number should be divisible by which of the following?
A. 3
B. 4
C. 5
D. 6
E. 7

2. Given a figure of a trapezoid, inside a rectangle. The trapezoid shared two complete sides of the rectangle... half or more in other side... other side was just joined from the half to the starting point. The sides of the rectangle are given. The question was to find the area of trapezoid?
(Something like this)

3. Given 3x = 4y = 10z, find the least value of z?

4. Given a triangle ABD, where <ABD = 90°, AC is the altitude drawn to the side BD, <ACB = 45° and <ADC = 30°. Given BC = x, find the perimeter of the triangle ABD?

5. Given 0.60 > x > 0.70. Which of the following is greater?
A. sqrt(x)
B. 1/x
& so on…….

6. Given numbers -8, 11, -19 …… If these numbers are squared, find out how many of these numbers are greater by 4 when they are multiple of 5?
(Something like this)

7. Given average of a set: {x1, x2, x3, x4, x5} as 'S' and average of another set: {y1, y2, y3} as 'T', then find the average of {x1, x2, x3, x4, x5, y1, y2, y3}?
A. S + T
B. 5S + 37
C. (5S + 3T)/8
D. (S + T)/2
& so on……..

8. What is the mean of 5 integers (closest to the nearest integer) if the median is 7, mode is 4 and the arithmetic mean of the largest and smallest integer in the series is 20?
A. 7
B. 9
C. 11

D. 13
E. 15

1 a
2 ?????
3 0
4 [3+(3)^1/2]x
5 ?????
6 ??
7 (5S+3T)/(S+T)
8 c

Quant:

1. Given that a line passes through the points (-10,-18), (20, 22) and (x, 2). Find the value of x?

2. Given that x < y and r < s < t < u. Given x, y, r, s, t and u are the variables that have values of increasing order. Find the variable that does NOT come second?
(Something like this)

3. Given range of a set of numbers 5, 9, 7, -2, x as 12. Find the value of x?

4. Given that there are 10 balls in a bag, 3 red, 2 green and 5 blue. Find the probability of selecting two balls that are green?

5. Given a circle with center 'O' and two chords are drawn, one is MN and other is TS, where MN = 4.3 and TS = 4.2. Asked to find which is greatest MT or NS?
(Something like this)

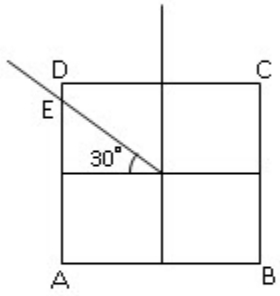
6. Given that a lady gets an income say 'x' dollars. If she spends some money for her livings, then she is left with 'y' dollars at the end of month.
Col A: x – y
Col B: y

7. Given that a certain sum of amount doubles in 10 years. Find its rate of interest?

8. Given that a < b < c, then
Col A: ab
Col B: bc

Quant:

1.



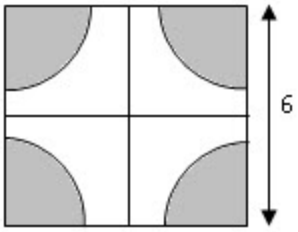
Given a figure of a square ABCD of side length 8 cm like above. Find the length of AE?

2. Given a/b = -3 and a > 0.
Col A: b
Col B: 0

3. Col A: 0.9999/0.9998
Col B: 1.0002/1.0001

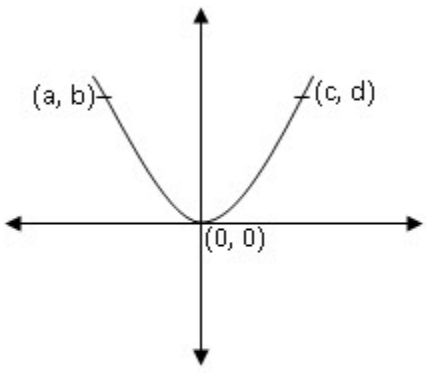
4. There are 20 balls in which some are green and some are red. If the probability of drawing a red ball is 0.8, then what is the probability of getting a green ball?

5.



Given a figure like above with a square and four quarter circles on it, find the area of the shaded region?

6.



Given a figure like above, what is the shortest distance between (c, d) and (0, 0)?

(Similar to this)

7. Given the mean of a five number set: {7000, 15000, k, 10000, 12000} as 11000. What is the value of 'k'?
(Similar to this)

8. From the following options, what is the highest two digit odd number divisible by both 5 and 7?
(Some options were given)

9. In a set of numbers 29, 32, 35, 36 and 38, if each number is added by 'k', then for the new set which of the following as to be true?
A. Median increases by K
B. Standard Deviation increases by k
C. Median remains same
D. Standard Deviation remains same
E. Both Median and Standard deviation remains same
(Similar to this)

10. A bus travels at an average speed about 210 miles in 3 ½ hours. How much time will it take to travel the same distance with 60mph speed?

11. Given P = D*I. If 'I' is decreased by 20 % then by what percent 'D' should be increased for the 'P' to remains same?

1. 4+4/root(3)
2. B
3. A
4. 0.2
5. ?
6. root(c^2 + d^2)
7. 11000
8. ?
9. A & D
10. 3.5
11. 25%

Quant:

1. Given that, a line passes through points (-3, -2) (0, a) and (a, 0). What is the slope of a line parallel to the given line?

2. Given area of a rectangle as 'x' and length as 80. What is its perimeter in terms of 'x' if width is 20% of length?
(Similar to this)

3. In a series -8, -3, 5, 8, 3, -5……., if every number in the series is the difference of last two numbers, then
Col A: The number that would first repeat third time is
Col B: 3

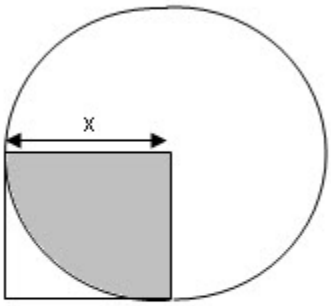
4. Given x > 1; x is an integer.
Col A: (x^x) x
Col B: [(x)^x]^x

5. Given some number 31345h69. What is the least possible value of 'h' for the number to be divisible by 3?
(Similar to this)

6. Given that a phone call is charged x cents in the first minute and y cents from the second min onwards. How many minutes did a person speak, if his bill is $4.94?
(Similar to this)

7. Given |(2x+3)| = 7.
Col A: The value of x
Col B: 0

8.



Given a figure of a square with a circle on it as shown above and the side length of square is given as 'x'.
Col A: Area of the Shaded region
Col B: x^2/4

1. -1
2. 2(80+x/80)
3. B
4. B
5. 2
6. (494-x)/y + 1
7. D
8. A

6-->ans

for n min x charge s min and y charge (n-s) min
charge x+(n-1)*y

so it would be x+(n-1)*y=4.94 (if x charge
(n-1)*y=4.94-1
n-1=(4.94-x/y)
n=(4.94-x/y)+1

ex--

for 1st min --->$1
2nd min -->$.2

then 2min---->1+.2=1.2
3min----->1+2*.2=1+.4=1.4
n=3
1*x+(3-1)*y

thanx for naeemulhassan

i think the 3rd question series starts with an 8 and not -8 acc to the condition specified, so if v calculate the series would b like 8,-3,5,8,3,-5,-8,-3,5,8....here 8 is the first repeated number third time so...option A is correct,,,plz do correct if wrong....

8th question solution...from the fig v can infer that the shaded region is greater then half of the square,so are of square is x^2,,,more then half would always b greater then X^2/4...

Quant:

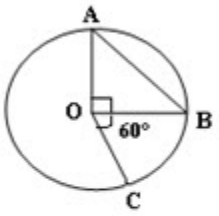
1 Given f(x) = |(16x+28y)|
Col A:Minimum value of f(x)
Col B: 4

2. There is a cube with side 'a', if one of its dimensions is increased by 20%, one is decreased by 20% and third remains same. What is the change in volume?

3. Given x = 2/3 and y = 1/3. What is the value of (x+y)/((1/x)+(1/y))?

4.Given a rectangle of length 'l' and width 'w'. If perimeter of the rectangle is 2.5, then what is its area?
(Something like this)

5.



Given the radius of the circle as 4
Col A: Area of triangle AOB
Col B: Area of sector BOC
(Similar to this)

1. D
2. a/25
3. 2/9
4. D
5. B

Quant:

1. Let 'S' indicates sum of all even no's from 1 to 100 and 'N' indicates sum of all odd no's from 1 to 100, then S-N equals to
A. 0
B. 99
C. 100
D. 199
E. 200
(Similar to this)

2. If x > 1, then
Col A: (x power x) power x
Col B: x power (x to power x)

3. Col A: 2 power x (4 power x)
Col B: 2 power 3x

4. Given sets f0, f1, f2, f3, ... f9 which has numbers according to their unit digits for example f5 has numbers 5, 15, 25, ... etc. Then, the cubes of the numbers of set f7 are present in which set?
A. f2
B. f3
C. f5
D. f7
E. f9
(Similar to this)

5. Given f(x) = 4(x power 2) + 20x + 25; x as an integer.
Col A: Minimum value of f(x)
Col B: 0

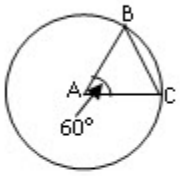
6. If a ball is dropped from a height of 6 miles, the ball will bounce back with 90% of its previous height. What is the height of the ball after 5th bounce?
A. (6+0.9) power 5
B. (6+0.9) power 6
C. 6(0.9) power 4
D. 6(0.9) power5
E. 6(0.9) power 4

7. Given mod(2x-3) < 8; x is an integer. Find the number of possible values of 'x'?
A. 1
B. 2
C. 3
D. 4
E. 5
(Similar to this)

8. A circle is inscribed in a square of length 'x'. Find the area of the circle inscribed in the square?
A. (πx^2) / 2
B. (πx^2) / 4
C. (πx^2)
& so on.....

9. Given that there are two parallel lines. P & Q are points on one parallel line and R & S are points on another parallel line. The distance between PQ is same as the distance between RS. If a point 'T' is the mid point of PQ, then
Col A: Distance from T to R
Col B: Distance from T to S

10.



Col A: Area of triangle ABC
Col B: Area of sector
(Similar to this)

11. Two graphs were given with frequencies on y axis and numbers from 1 to 6 on x axis. The question was to check, which of the following were same for both graphs
I. Mean
II. Range
III. Standard Deviation
(Similar to this)

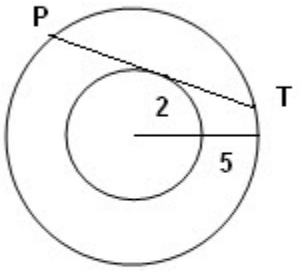
12. If the number of ways arranging a word is 180, then what is the word?
In options, five words were given.
(Something like this)

13. Col A: Number of positive factors of (2 power 3)(5 power 4)(7 power 5)
Col B: Number of positive factors of (11 power 3)(13 power 4)(17 power 5)

14. If DC6 + 2D = D8C. What can be the value of D?

A. 0
B. 1
C. 5
D. 8
E. 9
(Similar to this)

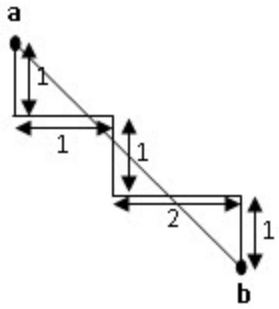
15.



Given two concentric circles with radius 2 and 5, a tangent is drawn to smaller circle which intersects the larger one at points 'P' and 'T'. Find the length of PT?
(Similar to this)

16. Given (2)^(-6) < x < (2)^(-5)
Col A: 4x
Col B: 1/12

17.



What is the distance 'a' and 'b'?
(Similar to this)

18. There are 20 colored pencils in a pencil stand. The probability of choosing a yellow pencil is 0.8. If there are 6 yellow pencils without an eraser, then what is the probability that a yellow pencil chosen is the one with eraser?
A.1/4
B.1/2
C.1/8
& so on....

1. 50 I think.
2. D
3. C
4. B
5. A
6. D
7. 8 I think. [-2---5]
8. B
9. D
10. B if sector means ABC
11. ?

12. ?
13. C
14. E
15. 2*root(21)
16. D
17. root(18)
18. B

Quant:

1. If (a)^(-3) + (b)^(-3) = 0 and ab is not equal to zero, then what is the value of (a/b)^2?

2. Col A: The number of ways of forming different groups of 2 kittens each from 8 kittens
Col B: The number of ways of forming different groups of 6 kittens each from 8 kittens

3. Col A: sqrt (120) + sqrt (50)
Col B: sqrt (90) + sqrt (80)

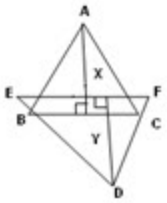
4. Given x is not equal to 0, y is not equal to 0 and xy is not equal to 0.
Col A: 1/(x^3+y^3)
Col B: 1/(x+y)^3

5. Given a line equation y = ax+b. If x-intercept is 5 and slope is 2, then
Col A: y-intercept
Col B: -10

6. Given a set of numbers: {10, 11, 12, 15, 15, 15, 17, 19, 20, 20}. If a number 15 is included in the series, then which of the following will change?
A. Mean
B. Median
C. Mode
D. Standard deviation
E. None

7. Given total(t) = n * p. If 'p' is reduced by 20%, then by what percentage, 'n' should be increased to balance the total?

8.



If x= y and EF || BC, then
Col A: Area of triangle ABC
Col B: Area of triangle DEF

9. In a set of five consecutive numbers, if the greatest value is x + 5, then what is the least value?

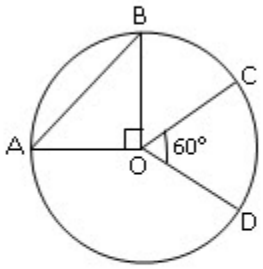
10. Given two concentric circles. The inner circle is a garden of radius 6m and the outer circle which has a cement path around the garden has a radius 8m. If the width of cement is 0.06, what is the volume of the cement?
(Similar to this)

11. Given statistics of bike sales in a company. In 1992, there is a loss of $600 and in 1993 there is a profit of $100. If in 1992, 3 million bikes were sold and in 1993, 4 million bikes were sold, then what is the net profit?

1) 1
2) b
3) a
4) D
5) C
6) i think that mean and standard deviation change ..... pls tell me i am wrong
7) 25%
8) b
9) x
10)

Quant:

1.



Col A: Area of arc COD
Col B: Area of triangle AOB

2. Find the total number of 4-digit odd integers greater than 1000 which have 6 in their hundredth place?

3. Given x((75+y) + (75-y)) = 900.
Col A: xy
Col B: 100

4. Which of the following cannot be expressed as the sum of three consecutive integers?
A. 0
B. 1
C. 2
D. 3
E. 5

5. Given a < 0 < b < c
Col A: ac/b
Col B: ac

6. If 2^(2x+1) − 2^2x = 2^1000, then what is the value of x?

7. Col A: (x^x)^x
Col B: x^(x^x)

8. How many numbers among nine consecutive positive numbers are divisible by 9?

9. Given a set of numbers: {1/2, 1/8, 2, 8}
Col A: Median of the set
Col B: Mean of the set

10. There are 10 set of numbers. Each set contains numbers whose unit's digit represent the set number. For example, if the set number is 1, the numbers in it are 21, 31, 51, and so on.. If the set number is 5 the numbers are 55, 75 and so on. So, if we take the cube of the numbers in set 7, then it represents which of the following set?
A. 3
B. 4
C. 5
D. 6
E. 7

11. Given that two points (0, 2) and (2, 0) lie on the circle.
Col A: Radius of the circle
Col B: 2

12. If x^2 + y^2 = 2xy, then
Col A: x
Col B: y

13. Given a set of three numbers {x, x^2, x^3}; -1 < x < 0. What is the ascending order of the set?

14. Given 7 < xy < 13, where x and y are positive integers. Find the total number of different possible values for XY?

1. A
2. 450 [9*1*10*5]
3. D
4. [1 2 5]---> (x+1) + x + (x-1) = 3x where x=INT
5. D
6. 500
7. D
8. 1

9. B
10. A
11. C
12. C
13. x x^3 x^2
14. 5 [8---12]

Can someone explain how 11th is C .. ?

the way i thought is..

assume center as (x,y) .

so dt of (x,y) from (2,0) = dt of (x,y) from (0,2)

(x-2)^2 + (y)^2 = x^2 + (y-2)^2,
we get x=y..

so checking with (1,1) (2,2) (3,3) as centers, radius will be root(2),2,root(10) .

plz correct if i m wrong ..!

i think the answer for 11th question is not 5..
xy can be 8,9,10,11,12
1*8,2*4,4*2,8*1=8
1*9,9*1,3*3=9
1*10,10*1,2*5,5*2=10
1*11,11*1=11
1*12,12*1,2*6,6*2=12
so possible distinct values for X and Y among the above can be
1,2,3,4,5,6,8,9,10,11,12
so total is 11..
answer is 11

Quant:

1. Given (x^2 + y^2) / 2 = xy.
Col A: x
Col B: y

2. If x and y are integers and 7 < xy < 13, then how many possible values of xy are present?

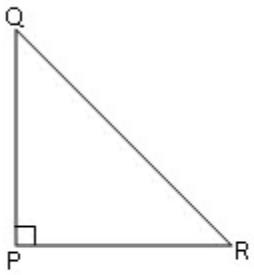
3. If (n, k) = n! / (k!(n-k)!)
Col A: (16, 3)
Col B: (16, 14)

4. Imagine a parabola intersecting Y-axis at some point (not passing through origin as given in the December 8th, 6th question). One point is given on parabola (3, b), equation of the parabola is given. What is the distance between the given point and the point where the parabola intersects Y axis?

5. Given that 'S' indicates sum of first 100 positive even numbers and 'N' indicates sum of first 100 positive odd numbers, then S-N equals to
A. 0
B. 99
C. 100
D. 199
E. 200

6. The term sqrt(0.3) is nearly equal to
A. (3/10)^2
B. [3/(10)^2]^2
C. (3/10)^3
& so on…….

7.



In right angle triangle PQR, if angle Q is 12 less than twice the angle R, then what is angle Q?

8. Col A: The remainder when (121)^6 is divided by 10
Col B: The remainder when (121,121)^23 is divided by 10

9. In a rectangular coordinate system, if two points (2, 0) and (0, 2) lie on the circle whose centre is origin, then
Col A: Radius of the circle
Col B: 2
(Similar to this)

10. Given a set of five numbers: {128, 168, 170, 180, 215}. If one number is increased by 120 and one number is decreased by 120 in the set, then
Col A: Standard Deviation of initial(before change) set
Col B: Standard Deviation of final(after change) set
(something like this)

hi frenz

1.C
2.4
3.A
4.???
5.100
6.NOT AMONG THE GIVEN
7.56
8.C
9.C
10.D

Hi 'nagthedestroyer' brother,

Actually I am from Bangladesh and know very little Hindi/Urdu. 

Here 2's answer is 5. Because, 8,9,10,11,12 all are integers which can be shown as xy. 11 can be written as 11*1.

But, today in my exam, the question was 'x and y are integer greater than 1.'
For this reason, I gave 4. Hope I am clear now.

I got almost 5-6 questions common in MATH from December database. Sorry, can not remember the verbal parts. But analogy/antonym words were easy. All from Barrons except the word 'Barrel'.

5----->

(2 - 1) = 1
(4 - 3) = 1
(6 - 5) = 1
...
...
...
(198 - 197) = 1
(200 - 199) = 1

Total sum = 100

So the answer is 100.

8------>

121/10-> remainder 1. As there is 121^6, so (1*1*1*1*1*1)/10 remainder is 1.

On the other hand, 121,121 = 121000 + 121 = 121000 + 120 + 1. So, 121,121/10 is also remainder 1. So, (1*1*1*1*1.....1*1)/10 which is (1)^23/10 is also remainder 1

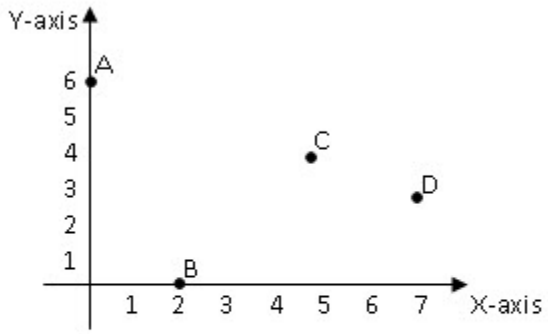
7.) angle p+q+r=180
given q=2r-12 and p=90
so 90+2r-12+r=180
so r=102/3=34
q=2(34)-12=56...

10.)The numbers from which the 120 is being subtracted and is being added r not given so v cant calculate it so "d"..
hope it helps

Quant:

1. Given N = (81)^56 and P = (96)^43
Col A: Digit in units place of (N+P)
Col B: Digit in units place of (N)*(P)

2.



If the slope of line joining any points in the above graph is -1/3, then joining which two points

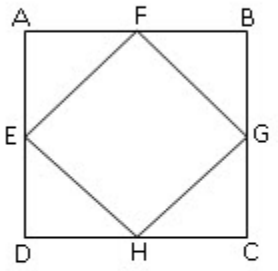
will give this slope?
A. A and B
B. A and C
C. B and C
D. C and D
& so on……
(Similar to this)

3. Given 7 < xy < 13; x and y are greater than 1. Find how many xy values are possible?

4. Given a series -8, -3, 5, 8, 3, -5……
Col A: The first number that repeats third time
Col B: 3

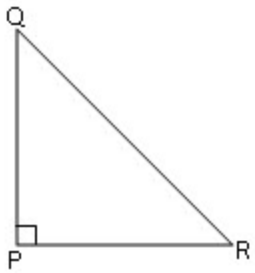
5. If mod(x – 3) < 8, then find the number of possible values of x?

6.



Given that ABCD is Red wire and EFGH which are the midpoints of AD, AB, BC and CD is a blue wire.
Col A: Length of Red wire
Col B: Length of Blue wire

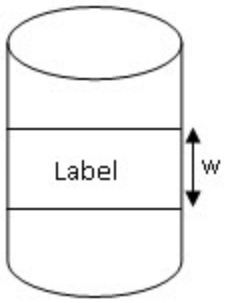
7.



If angle Q is 12 difference of twice the angle R, then what is angle Q?

8. Given 5 different values. One value is increased by 120 and one value is decreased by 120.
Col A: Standard Deviation before change
Col B: Standard Deviation after change

9.



Given a figure of cylinder like above with a label of width 'w' on it. If the base radius of the cylinder is 10 and area of the label is equal to area of the base, then
Col A: w
Col B: 3*(1/2)
(Similar to this)

10. If the tens digit of a number 'x' is 7 and tens digit of a number 'y' is 8, then
Col A: Unit digit of 'x' + Unit digit of 'y'
Col B: 5

11. Given x < y < z.
Col A: z – x
Col B: y – x

12. Given 'y' is the cost of an article. If the cost of the article increases by 'x%' every year from 1945 to 1990, then what is its cost after 45 years?
A. x {1 + (y/100)} ^ 45
B. y {1 + (x/100)} ^ 45
C. y {1 + (45x/100)}
& so on……

And Previous Database Questions Appeared.

1. A
2. A
3. 4
4. B

5. 15
6. A
7. 56
8. D
9. A
10. D
11. A
12. B
correct me if any wrong

_____
y.rajasekhar

2) can u explain how can we get slope -1/3

11) x<y<z
the range of x,y, z is not mentioned, so we can take -ve integers also
if x,y, z are positive integers then z-x > y-x
if x is -ve integer then z-x < y-x.

So, answer for this question is D.

11...
if we consider 3, 4 ,5
z-x>y-x...

and if we consider

-5, -4 -3
then also z-x>y-x

plz correct me if wrong.....

yes for 11th qus A is the correct option.....i made a check of lot of -ve n +ve combinations.....

Quant:

1. Given |2x + 3| = 7
Col A: x
Col B: 2

2. Given 7 < xy < 13; where x, y are integers. Find the number of solutions of xy?

3. Col A: (121)^2
Col B: (121,121)^2

4. Which of the following is greater?
A. (0.3)^2
B. 3/(10)^2

C. 3/(10)^3
& so on……

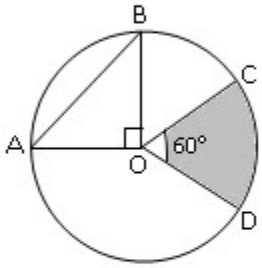
5. In a series of consecutive even integers, if the greatest integer is x + 5, then what is the lowest integer?

6. Given a series a1, a2, ……. an. If a1 = 1/2, ak = (some value) and an = (n / n + 1)*a(n-1), then
Col A: k
Col B: -1/5
(Here 1, 2, k, n-1, n, k are suffixes).

7. If the number of ways of arranging the letters of a word is 180, then what is the word?
A. Letters
& four more options were given.

8. Given an equation x^2 – x + 1 <= 0. Find the number of possible values of x?

9.



Col A: Area of the triangle AOB
Col B: Area of the shaded region

10. Given an equation 3x + 2y + z = 42; where x, y, z are positive integers.
Col A: x + y + z
Col B: 18

11. Col A: (-2)^5
Col B: -1

12. What is the square root of 0.1?

13. Given (2)^x * (2)^y = 8.
Col A: x
Col B: y

14. Given a right angled triangle with hypotenuse 3 and other two sides as sqrt(5-4a) and sqrt(5a + 4). Then the value of 3a = ?
(Similar to this)

15. There are 10 set of numbers. Each set contains numbers whose unit's digit represent the set number. For example, if the set number is 1, the numbers in it are 21, 31, 51, and so on.. If the set number is 5 the numbers are 55, 75 and so on. So, if we take the cube of the numbers in set 7, then it represents which of the following set?
A. 3
B. 4
C. 5
D. 6
E. 7
(Similar to this)

And many previous database questions appeared.

1. D
   2. 20
   3. 0
   4. A
   5. D
   6. ??
   7. ??
   8. Not any?
   9. B
   10. D
   11. B
   12. .3…….
   13. D
   14. 0
   15. A

1- D Because x= +2 or x= -2
2- 5 since x and y are integers then xy = 8, 9, 10, 11, or 12
3- B
4- A
5- x+1 for example: x = 10, then x+5 = 15 then a series is 11,12,13,14,15 that the lowest number is 11 which is x+1

5 ans

given conseq 5 even integers

so
2n,2n+2,2n+4,2n+6,2n+8

greatest interger is equals to x+3

so 2n+8=x+3

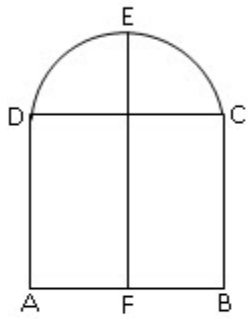
2n=x-3
so least integer is x-3 becoz 2n is the least interger

Quant:

1. Given x = 1/2 and y = 1/3. What is the value of xy/(x + y)?

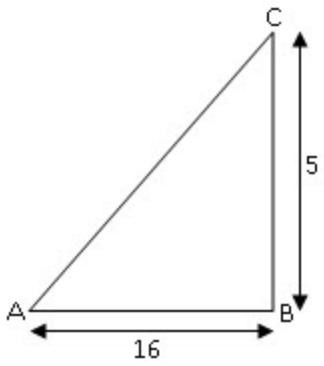
2. Given an equation y = ax + b with slope 5 and x-intercept 2. Find the y-intercept?

3.



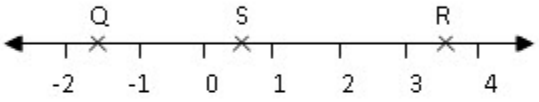
Given that the line EF bisects the base AB of the square ABCD whose side length is 'x', find the length of DEC?

4.



If a point 'S' is on the base AB, then what is the probability that length of SC is 13?

5.



Col A: QS
Col B: SR

6. Given (x + y)^2 – (x – y)^2 = x^2 + 2xy + y^2, then
Col A: x
Col B: y

7. If sqrt(x)*sqrt(y) = sqrt(x + y), then what is the value of x in terms of 'y'?

8. Given P1 and P2 working together completes a work in 8 hours. If P3 alone completes the work in 12 hours, then how much time it would take for the three to the complete the work?

9. Given that 'x' is a negative integer.
Col A: (-x)^3x
Col B: (-x)^(3x+1)

1.1/5
2.-10
3. ?
4. ?
5. D
6. C
7. y/y-1
8. 24/5
9. D

4 ans--->
given base lenght 16

s is a point on the base

the probility of s to become 13

bc =5 sb=12 then sc=13

so 12

given length of the square is x so dc=x

half of dc is the radius of semi circle

so radius is x/2

circumference of semi circle is pi*r

so pi*x/2

but asked lenght of dec so circumference-(minus) dc length

pi*x/2-x

i think this will help

Quant:

1. Given x < y < z; where x, y, z are sides of a cuboid.
Col A: Volume of cuboid with edges x+10, y, z
Col B: Volume of cuboid with edges x, y, z+10

2. Given an equation x^2 – x – 6 = 0. How many integer values satisfy the equation?

3. Given a set of five consecutive even numbers. If the highest value of the set is x + 5, then what is the least value of the set?

4. Col A:[(x)^x]^x
Col B: x^(x^x)

5. Given five scores of a person 257, 450, 550, 850 and 1020. If two scores are wrongly reported by person, one with 120 increase and other with 120 decrease, then
Col A: Standard deviation of initial set
Col B: Standard deviation of set after change.

6. Given that a number 'x' when divided by 7 gives remainder '3'. If the number '2x' is divided by 7, then what is the remainder?

7. Given dimensions of a cuboid as 12 X 7 X 4. What is the least volume of the cube that could be formed using the given dimensions of the cuboid?

8. Given f(n, r) = n!/(n – r)! * r!
Col A: f(16, 3)
Col B: f(16, 4)

9. If y < x < -y
Col A: y^2
Col B: x^2

10. In a survey, it was found that 10% of the students who are susceptible to disease are less than 20 years of age and 60% of the students who are susceptible to disease are more than or equal to 20 years of age. What is the percentage of the students (whose age is more than or equal to 20 years) are not susceptible to disease?

11. If -1 < x < 0, then what would be the increasing order of the set: {x, x^2, x^3}?

1 A
2. 2

3. 3
4. D
5. C
6. 6
7. 1(I have consider this as 1 X 1 X 1 (Minimum volumn)
8. B
9. Seems to be Wrong , How (y <x <- y)
10 . Insufficient Data
11 x^2, x^3 , x

Let me Correct if I am wrong in this solution.

-Pankesh

if x=1,y=2,z=3
then A is great
if x=3,y=2,z=1
then B is great

so ans is D

1.D
2.2
3.x-3
4.D
5.D
6.6
7.4*4*4
8.B
9.A
10.????
11. x^3 x^2 x

he dint mention x,y are positive...

so consider x=-3, y=-5 then -y=5

this satisfies y,x,-y
then ypower2 > xpower2..

help me if i am wrong

for 3 question.... given highest value is X+5..

then the least value is X...

eg....x=0, then set { 1, 2, 3 ,4 , 5}

highest value is X+5... so the least value is X..

help me if its wrong

10.
consider totally 100 members... it will help in percentage calculations.

10% are under 20 years.. that is 10 members..
we r left with 90 members.. among them 60% is 54 members.. so totally 64 members..
remaining are 36 members.

so the answer may be 36%

the answer for Q.1 is A

since x<y<z, so let x = 1, y = 2, z = 3
give volume would become (11)(2)(3) = 66
and expression for 2nd volume would become (1)(2)(13) = 26
Thus answer is A

2. **Given a set of five consecutive even numbers. If the highest value of the set is x + 5, then what is the least value of the set?**

5 consecutive EVEN number can be go like this -
{-4 -2 0 2 4} Or {-8 -6 -4 -2 0} Or {0 2 4 6 8} Or {2 4 6 8 10} or so many like this

If the ques ask for the set of even numbers greater than 0 then Ans is: 2
If the ques ask for the set of even numbers >= 0 then Ans is: 0
If the ques ask for the set of even numbers <= 0 then Ans is: -8

But as here nothing is mentioned so ans is "insufficient data" Or to select the best options from the ans set

Another thing... here the ques ask to find the value of the set ... not the value of x i think .....

Correct me if i am wrong....
_____

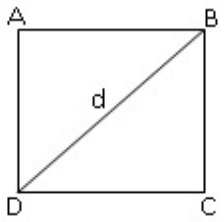
Try and Fail but dont Fail to Try

Quant:

1. Given xyz = odd integer, then which of the following is even?
I. x(y + z) II. xy + z III. yz +x
A. Only I
B. Only II
C. Only I and II
D. Only III
& so on.....

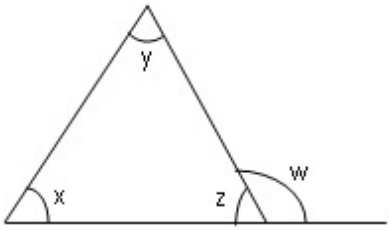
2. Col A: |-2.4| + |4.8|
Col B: 2

3.



As shown, if 'd' is the diagonal of the square ABCD, then find the area of the square?

4.



Col A: y + z
Col B: w

5. The discount on a certain product is x% in June and it is followed by another discount of x% in July. If the resulting price is 81% of the original price, then
Col A: x
Col B: 10%
(Similar to this)

6. Given the standard deviation of set of three numbers w + 6, s + 6 and p + 6 as 'k', then what will be the standard deviation of set w, s and p?
(Similar to this)

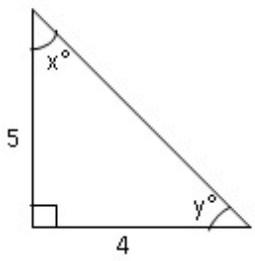
1)all are even
2)A
3)(d^2)/2
4)D
5)C
6)K

Quant:

1. Given that there are 3 class rooms with x boys, y girls in one class, x boys, z girls in one class and x boys, z girls in other class. Find how many girls are there in each class?

2. Given 0.01786 < x < 0.01896, then
Col A: The thousandth place of x
Col B: 8

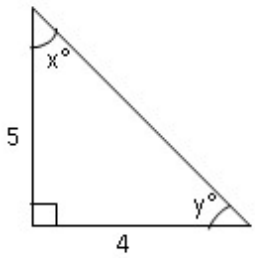
3.



Given area of square PQRS as 16. If RS is 175% and SZ is 25%, then find the area of the triangle?
(Something like this)

4. Given 2^(x – y) = 1/64.
Col A: x + y
Col B: Some value

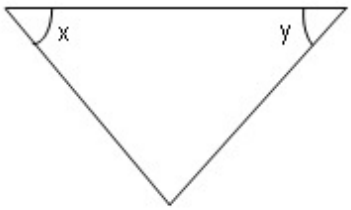
5.



Col A: x
Col B: y

6. If the arithmetic mean of set: {10, 20, x} is equal to median of set, then find the value of x?

7.

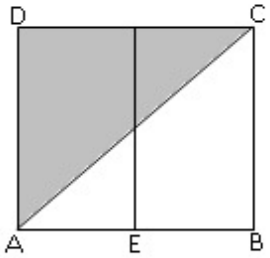


Col A: x
Col B: y

8. If 5x^2 + 2x + 7 = 5x^2 + 9, then find the value of x?

9. Given the original price of furniture as $54.00. Because the manager of the furniture store thought he could get more money for the furniture, he increased the price of the furniture to 10% of its original price. After a week, the furniture had not sold, so the manager then discounted the price by 8% and the furniture was finally sold. At what price was the furniture sold?
(Similar to this)

10.



Given a figure of a square ABCD like above. 'E' is the midpoint of AB. If the area of the square is 24, find the area of the shaded region?

11. What is the ratio of 1/3 to 3/8?

1) not enough info

2) D x=.01796 or .01886

3) not enough info
4) x-y=-6, other than don't know how to complete it

5) B
6) x=30 or 15 depending on order of set
7) D
x=1
9) 54.648

10) area =24*sqrt(2)

11) 8/9

Quant:

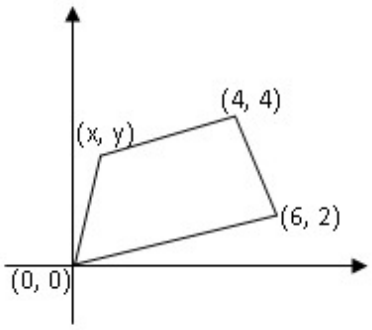
1. Which of the following is greater?
A. {1/(30)^2} + 1
B. {1/(30)^2} – 2
C. {1/(30)^3} + 1
& so on……
(Similar to this)

2. Given 2 > a > 3 > b > 4.
Col A: ab/c
Col B: c

3. Col A: |10^-3|
Col B: 10^(-3)

4. Given w > 0 and z > 0
Col A: w^4 + z^3
Col B: w^2 + z

5. Given a figure like below.



Find the value of x + y?
(Similar to this)

6. Given a series 1,-3, 5, -7, 9…… and tn = [(-1)^(n – 1)] * (2n – 1). Find the sum of first 25 terms?

7. Given x > 2 and y > 2.
Col A: xy
Col B: 24

8. Col A: Area of three non-touching circles of radius 1 each
Col B: 3π

9. In company, 25% of the members work in receiving calls. If the average of the calls is 3.67, then
Col A: The number of people who work in receiving calls
Col B: 2
(Similar to this)

10. A company manufactures 2000 toys. If 3/4th of the toys are donated and 3/40th of the toys are sold, then
Col A: The number of toys that are stored
Col B: 3,250
(Similar to this)

11. Col A: 0.07 + 0.06 + 0.05 + 0.04 + 0.03 + 0.02 + 0.01
Col B: 0.07 * 0.06 * 0.05 * 0.04 * 0.03 * 0.02 * 0.01

12. Given roots of an equation as -1 and 1/2, which of the following equations have the same roots?
A. 2x^2 + x – 1
B. 2x^3+ x^2 + 1
C. x^2 + x + 1
& Two more options are given.

13. Given area of a parallelogram and asked to find the diagonal length?

14. Given 2^(2x + 1) – 2^2x = 2^1000. Find the value of x?

15. Col A: 17.3 * 3.1
Col B: (17 * 3.1) + (1.3 * 3.1)

1)a
2)? where s c to solve...ans will be d if it is the same q
3)c
4)d
5)oops i donno...data in sufficient
6)25
7)d
 c
9)not clear 

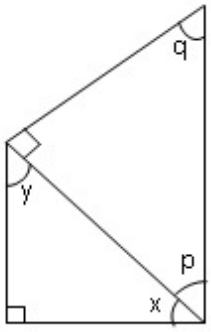
correct me if iam wrong...i have my exam on 16th could some one help me in these probs...if i am wrong some where[/b]

Quant:

1. Given a sequence -9, 10, -11, 12, -13, 14..... If the nth term of the sequence is (-1)^n * (2n – 1). Find the sum of first 27 numbers?

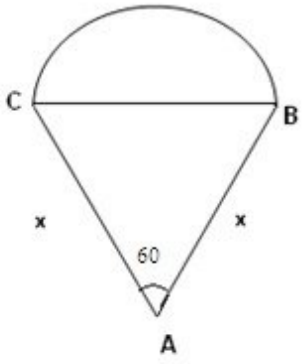
2. Given two sets A = {9, 8, 10, 11} and set B = {14, 15, 18, 19, 20}. If a new set C is formed from the sum of sets 'A' and 'B', then how many distinct values are possible in set C?

3. Given a figure like below.



I. x – p = q – y
II. x + p = 90°
III. y = q
A. Only I
B. Only II
C. I and III
& so on……
(Similar to this)

4.



A semicircle is drawn on a triangle as shown in the figure. If the circumference of circle is 16π, then
Col A: The area of triangle ABC
Col B: 25
(Similar to this)

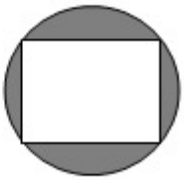
5. Given that a person A can sow his field in 12 days and person B can sow his field in 13 days. If they work together, in how many days they can complete the work?
(Similar to this)

6. A committee of 9 members is to be formed from a group of 25 members with 16 females and 9 males. Find the number of ways of forming a committee, such that 4 females are always to be included?
(Similar to this)

7. Col A: 1/(0.02)^-1 + 1/(0.04)^-1
Col B: [0.02 + 0.04]^(-1)

8. Given [(x + 1)/x]/(x + 1) = 99, find the value of [(x – 1)/x]/ (x – 1)?

9.

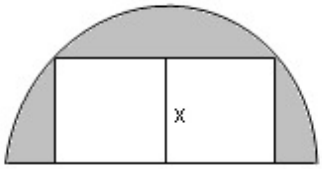


If the area of the circle is 16π, find the area of the shaded region?

10. Given vertices of a triangle as (4, 3), (0, 0) and (8, 0). Find the perimeter of the triangle?

11. If a sum of money triples itself in 10 years, then by how many years it becomes 4 times?

12. Given a figure like below.



If 'x' is the height of the rectangle, then
Col A: Area of the rectangle
Col B: Area of the shaded region
(Similar to this)

1)-22
addn of 1st 26 elements is 13 + (-35)
2)9
3)a
4)a
5)156/25 i.e6 6/25days
6)16C4X9C5 + 16C5X9C4 + 16C6X9C3 + 16C7X9C2 + 16C8X9C1 +16C9
at least 4 females always included
7)b
8)99
9)????
10)18
11)15
12)????

for 1 st question
sn=n/2[a+l]
a=-9,l=(-1)^27*((2(27)-1))
=-53
sn=27/2[-9+-53]
= 13.5*-60

any body tell am i right or not? if not plz explain clearly...

Quant:

1. Col A: The remainder when (7^0 + 7^1 + 7^2 + ……. + 7^19) /14
Col B: 7

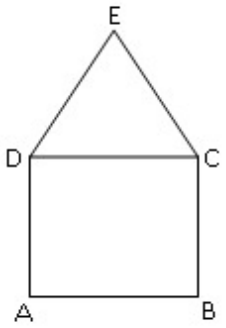
2. Which CANNOT be the factor of (2^n)*(3^k), where n and k are both positive integers?
A. 8
B. 24
C. 42
& so on……

3. Given f(n) = [⟦(-1)⟧^n]*c*n, where 'c' is the cost. If f(1), f(2) and f(3) are the similar

functions and the difference between the largest and smallest among f(1), f(2) and f(3) is 20, then
Col A: f(4)
Col B: 16
(Similar to this)

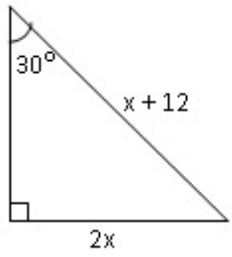
4. Given that there are 10 numbers in a sequence starting with 5, the rest are obtained by doubling the preceding number and subtracting 3. What is the 4th number?
(Similar to this)

5.



Given area of the triangle DEC as 10 and side of square as 10. Find AE length?
(Similar to this)

6.

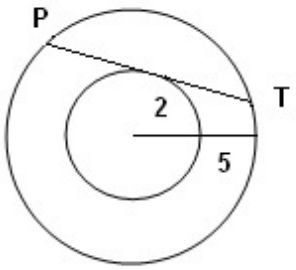


What is the value of x?
(Similar to this)

7. Col A: Average of a list of numbers
Col B: Median of a list of numbers

8. By selling two articles for Rs. X each a shopkeeper gains 30% on one and looses 30% on the other, find the profit /loss percentage?
(Similar to this)

9.



What is the length of segment 'PT'?
(Similar to this)

10. Given S1: {10, 15, 20, 25, 30} and S2 = {15, 20, 25, 30, 35}.
I. Mean of S1 and S2 is same.
II. If S1 is divided by 5 and S2 is divided by 5, then the mean of S1 and S2 is same.
III. xxxxx
A. Only I
B. Only II
C. I and II
& so on……..
(Something like this)

Quant:

1. A circle is inscribed in a square, which is inscribed in another circle. Find the ratio of areas of smaller circle to the larger circle?

2. Given a point on the x-axis (-k, 0) at point 'R' and another point S (m,0) on x-axis which is not shown in the figure is given. If RS = k^4, then
Col A: m
Col B: 0

3. Given the age of a person 'X' as four times the age of his son. After ten years, if the age of X is twice the age of his son, then what is the present age of his son?
(Similar to this)

4. Given that two cyclists are moving towards each other at speed of 20 miles/hour and they are

about 100 miles apart. At this instance a fly starts from one cyclist and move towards other and moves to and fro till the two cyclists meet each other. If the fly is moving at 30 miles/hour, what is the total distance covered by the fly?
(Similar to this)

5. A certain sum of amount P, increases at r% from 1990 to 1995 and 1995 to 2000. If the total amount is (7/5) p at the end of 2 terms, then what is the rate of interest?
(Similar to this)

6. If x < y < z, then
Col A: xy
Col B: yz

7. When a number is divided by 12, the remainder is 5. What is the remainder when the square of that number is divided by 8?
(Similar to this)

1--->1/sqrt2
2--->D
3--->5
4--->75
5--->16.5(i am not sure)
6--->D
7--->1

1--->ans

given a circle inscribed in a square

and the square is inscribed in another circle

so radius of first circle is x ie length of the square

and radius of another circle is diagonal(hypotunes) of the square so xsqrt2

so rations of areas is pi*x/pi*xsqrt2

x/xsqrt2
1/sqrt2

5--->ans

given principle amount p
rate is r
time is 10 yrs
and s=7/5p

(7/5)p=(p*10*r/100)

on solving we get r=16.5 i am not sure becoz weather t is 10 or 2

Quant:

1. If 4y – 1 > 9, then
Col A: y
Col B: 3

2. Col A: 0.2% of 4
Col B: 1/500 of 4

3. A square is formed by joining midpoints of another square as shown in figure. If the perimeter of larger square is X, then
Col A: Perimeter of smaller square
Col B: X/2
(Similar to this)

4. Given that in a pack of plates, 1/3 plates are damaged, 2/3 plates are cracked and 1/3 of them are damaged and cracked. If 80 are not hampered, then what is the number of total plates?
(Similar to this)

5. In a set of numbers from 1 to 10. If two numbers are to be selected from these 10 numbers with replacement, then what is the probability that at least one of them is even?
(similar to this)

6. Given 'd' as the standard deviation of set:{ x, y, z}, then
Col A: The standard deviation of x +2, y+2 and z+2
Col B: d + 2

1. D
2. C
3. A
4. 180
5. 5/9
6. B

Consider there are "x " number of total plates .
As 1/3 plates are damaged -- > x/3 damaged plates
As 2/3 plates are cracked ----? 2/3(x) cracked plates
As 1/3 plates are cracked and Damaged --> 1/3(x)

so , x/3 + 2/3(x) - x/3 = 2/3(x) plates are either damaged or cracked

thus 80 + 2/3(x) = x

X = 240 (Total Number of plates)

-Pankesh
Correct me if I am wrong .

According to me Ans for 5th question is 1/4.

coz two numbers to b selected with replacement.
(5c1 * 5c1) / (10c1 * 10c1).

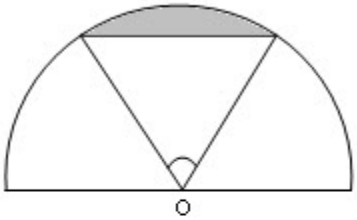
5- even
5-odd.

Correct me if i m wrong..

Quant:

1. Given that there are three couples, who are to be arranged in 6 seats. Find how many ways they can be arranged, such that husband and wife sit together?
(Similar to this)

2.



Given a figure of semicircle like above with the radius of circle given and the angle of the sector is also given. Find the area of the shaded region?
(Similar to this)

3. A person 'X' sells his TV set to another person 'Y' at a loss of 15%, but 'Y' sells it to another person 'Z' at a profit of 10%. If 'Z' pays $9350 to 'Y', then
Col A: The amount 'Y' pays to 'X'
Col B: 8500
(Similar to this)

4. Given few numbers like 2, 5, 6, 7, 9. Find the number of ways of arranging a five digit even number from the given numbers?

5. In how many ways, 7 gents and 4 ladies can be arranged circularly in a meeting?

6. Given 1 < x < 2 < y < 3 < z < 4
Col A: x + y + z
Col B: some value (xx)

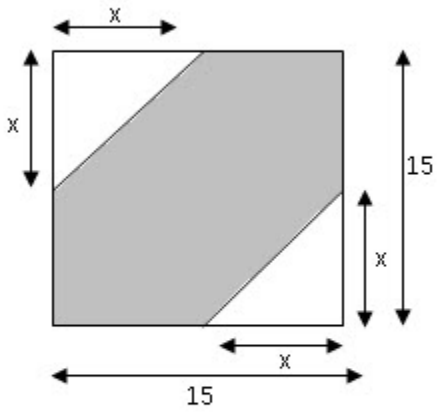
7. Given that there are two light poles, one pole is having bulb A and another is having bulb B such that the first pole is 60ft and second pole is 100 ft height. If the distance between two poles is 30 ft, then find the distance between A and B?

8. Given a sequence like x, w, y, z, 0, 1, 1, 2, 3. Find the value of x?

9. Col A: (10)^-2
Col B: 0

10. From the set of numbers: {1, 2, 3, 4, 5, 6}, how many different sums can be formed by summing up any two numbers in the set?

11.



Given a figure of a square like above. Find the area of the shaded region?

1--->6p3
2--->((o/360)*pi*r^2)-1/2(r^2sin(o/2))
3--->c
4--->2*4!
5--->10!
6--->?
7--->50

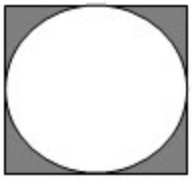
8--->-3y
9--->a
10--->6c2
11--->225-x^2

Quant:

1. Given x = [root (200) – root (8)] / root2
Col A: x
Col B: 8

2. Given perimeter of a circle as 'pie' and area as 3*pie/2. Find the radius of the circle?

3.



Given a figure like above. If the area of the shaded region is 1, then find radius of circle?

4. Given two sets S={2, 4, 6} and T={2, 4, 6, 8, 10, 12}. If M is a new set, such that 'S' is subset of 'M' and 'M' is subset of 'T', then find how many values can set M have?

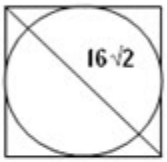
5. Given xy not equal to 0 and x not equal to y. If x/y = y/x, then
Col A: x + y
Col B: 0

6. Given 31345x69 is divisible by 3. Find the least possible value of x?

7. Given that a solution contains 33 ½ percent of alcohol, 12 ½ salt and rest water. What is the ratio of alcohol to salt to water?

8. Given ab = b+1 and a(b + c) = ab + c.
Col A: c
Col B: a/(b+1)

9.



Given length of the diagonal of the square as 16√2, then find the radius of the circle?

10. Given GCM and LCM of 'k' and 'n' are given. Calculate 'n' when 'k' is also given? (Something like this)

11. 1/2 is what percent of 2/3?

12. Given x^2 + y^2 = 2xy
Col A: x
Col B: y

13. Given a rectangle of length L and width is 20% of length. If the area of the rectangle is 'x', then find its perimeter in terms of x?

14. Given f(x) = 4x^2 + 20x + 25, where x is an integer.
Col A: Minimum value of f(x)
Col B: 0

15. A ball is dropped from height of 6 meters and ball bounce back not more than 90% of height. Find the height after 5th bounce?

16. If |2x - 3| = 7. Find the possibilities of x?

1)C
2)DATA NOT CLEAR
3)sqrt(7/6)
4)4 or 5
5)c
6)2
7)67:25:108
8)?????
9)2
10)GCM*LCM/K
11)75%
12)C
13)12*sqrt(x/5)
14)A
15)6*(0.9^5)=3.54
16)5 and -2

I think solution should be this way :

(16* sqrt(2)) ^ 2 = (x) ^2 + (x) ^ 2 . (I am considering x as one side of the Square).

=> 16 * 16 * 2 = 2 * x^2
=> 16 * 16 = x^2
=> 16 = x (One side of the sqaure)

So the radius is 16/2 = 8 .

Quant:

1. Given x = 10^20 + 1.
Col A: The remainder when 'x' is divided by 11
Col B: 2

2. Given a figure of a cube with one side midpoint joined to the other corners thus forming a rectangle. Find the area of that rectangle, if the side length of the cube is 1?

3. Given that three machines x, y, z take 4hrs, 6hrs, 8hrs respectively to print equal number of pages. What is the fraction of total work, the machine can do with maximum speed?

4. If 0 < r < t, then
Col A: r + rt^2
Col B: 1

5. Given n is an integer, such that <n> = (-1)^n
I. <a + b> = <a> + <b>
II. <a * b> = <a> * <b>

III. <a + b> = <a> * <b>
A. I only
B. II only
C. I and III only
D. I, II and III
& so on…….

6. Given that three couples are to be seated in a row, such that husband and wife should always sit together. Find the number of ways the arrangement can be done?

7. Col A: Least prime factor of 7! + 7
Col B: Greatest prime factor of 7!

8. Given a figure of a circle with a square inscribed in it, whose diagonal length is 16*root(2). Find the radius of the circle?

1) remainder=2 , answer C
2) 1
3) x
4) D (Since r and t not mentioned as either integer or rational no.)
5) ii and iii
6) 48
7) C
8) 2 (repeated question, jan 11th data base)

1) C
2) 1
3) 
4) D
5) B
6) 12
7) C
 8*sqrt(2)

3) 1/6+1/4+1/8= 13/24

take inverse so answer is 24/13

5) only III is correct

plug in a=-1, and b=2

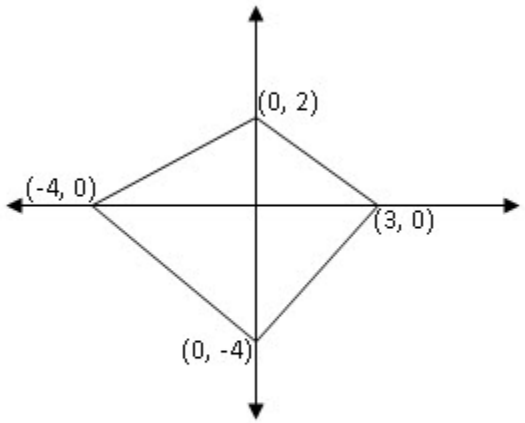
6) I had to write this out to make sure but indeed 48 is the correct answer
there are 3! ways to arrange each couple
and 2! ways to arrange each husband and wife

since there are three couples this comes out to
2!*2!*2!*3!

Quant:

1. Find the value of [sqrt(200) – sqrt(8)] / sqrt(2)?

2.



Given a figure like above. Find the area of the figure?

3. Given a series a1, a2, a3, a4…….. an. If a1=2 and an = a(n-1) + 3, then find the value of a100?
(Note: Here 1, 2, 3, 4, n-1, n are suffixes)

4. A person plans a party where he has to select 2 out of 4 sweet varieties and 4 out of 5 curries. Find the number of ways he can select them?

5. On a rectangular coordinate a line 'k' passes through (1, 2) and another line 'm' passes through (2, 1).
Col A: Slope of line k
Col B: Slope of line m

6. Given ab≠0, a ≠ b and a/b = b/a.
Col A: a + b
Col B: 0

7. Find the sum of the common prime factors of 51 and 204?

8. Given that 'a' travels at 30miles/hr and 'b' travels at 60miles/hr. If 'b' travels 'T' miles in 3 hours, then how much distance can 'a' travel in the same time?
(Similar to this)

9. Given a set, S = {1, 2, 3, 4, 5, 6, 7}. How many four digited numbers can be formed from the set 'S' without repetition?

10. Given that a point p(3, 2) lie on a circle whose centre is (-2, -3), find the circumference of the circle?

11. Given 0 < x < 1. Which of the following has the greatest value?
A. 1/x
B. 1/x^2
C. x
D. x^2
E. 1

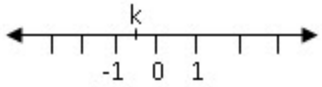
12. 150 square feet is equal to how many square yards (Given 1 yard = 3 feet)?

13. Col A: sqrt[a + b + 2sqrt(ab)]
Col B: sqrt(a) + sqrt(b)

14. Col A: Standard Deviation of 16, 5, 14, 5, 8, 16
Col B: Standard Deviation of 6, 8, 18, 14, 18, 8

15. Given that P and N are integers. If 5N = P^ 2, then
Col A: N
Col B: 3

16.



Given a figure similar to above, if the distance between 'k' and some point 'm' on the number line is k^4, then
Col A: m
Col B: 0
(Similar to this)

17. Find the area of the plane connecting one edge and line connecting mid point of the opposite face.
(Something like this)

18. And another question on rate of flow of water.

1) 8
2) 21
3) 299
4) 30
5) D
6) C
7) 20
8) T/2 miles
9) 140
10) pi *10*sqrt(2)

1) 8
2) 21
3) 299
4) 30
5) D
6) C
7) 70
90miles/hr
9) 840

10)10* TT * sqrt(2)
11)B
12)16.667 aquare yards
13)C
14)B
15)D
16)B

15) 5N = P^2
N should be non-negative integer, P is any integer either positive or negative.
the lowest value for N to satisfy this equation is 5.
so, N >3.
ANSWER A.

15.why is the minimum value for n 5 ?

I guess the ans id D.

5N=p^2 ==> p=sqrt(5N)

ie p<N bt both of them r eql only if p=n=5.so p can be either less than n or eql to n.so the ans is D.

plz crct me if I was wrng

14) should be b, calculate the std for each column

15) D try P=5 and N=5

then try P=1 and N=1/5

16) if k=-1/2

then the distance from m is 1/8

it doesn't matter which side of k m is on

it will always be negative

thus B

Quant:

1. Given A's speed as 50 km/h and B's speed as 55 km/h. If 'A' covers a distance in 7 hours, then how much time 'B' takes to cover the same distance?
(Similar to this)

2. What is the value of |7| + |3| - |-10| ?

3. Given a quarter circle (90 degrees) with radius of the circle as 's'.
Col A: Area of the sector
Col B: Some value.
(Something like this)

4. Given a set of numbers k - 1, k, k + 1, k + 2, k + 3, k + 4, k + 5. Find the ratio of mean to median?
(Similar to this)

5. Given there are 'n' employees of which 70% are lawyers and 55% of these are females. How many percentage of these 'n' employees are male lawyers?
(Similar to this)

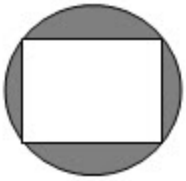
6. Given P = (x) (x + 1) (x + 2) (x + 3), where x is a positive integer.
Col A: The remainder when P is divided by 3
Col B: 1

7. Col A: 1.5% of 0.4% of 500
Col B: 15% of 4% of 5

1)70/11 hours
2)0
3)????
4)1:1
5)31.5
6)b
7)c

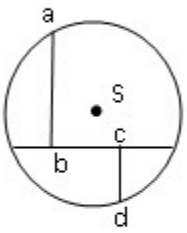
Quant:

1.



Given the area of the shaded region as 1sq.m, find the radius of the circle?

2.



If 'r' is the radius of the circle, then
Col A: (ab + cd)/2

Col B: r

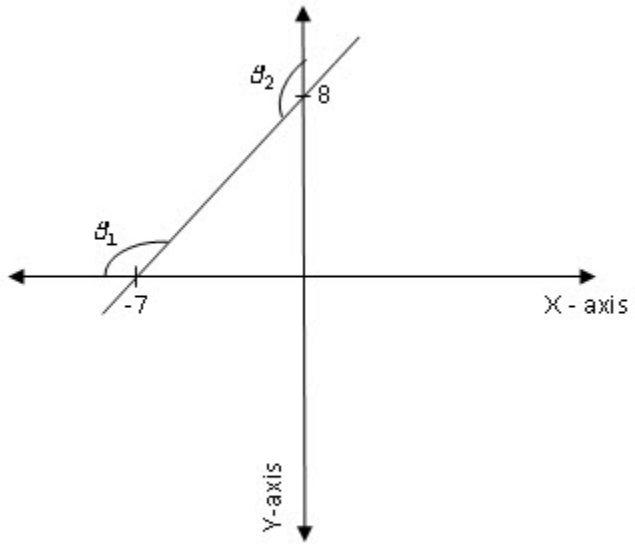
3. Col A: |-7|+|-3|-|3|
Col B: 0

4. Find the sum of the common prime factors of 51 and 204?

5. Given [x – 1/x]/ [1 + 1/x] = 99. Find the value of [x – 1/x]/[1 + 1/x]?

6. Ina hospital, on one day 500 sets of twins are born. If B sets are both boys and G sets are both girls, then find the number of boy and girl sets?
(Similar to this)

7.



Col A: θ1
Col B: θ2

8. Given a series -5, 4, ... and tn = t(n–1) – t(n + 1). What is the sum of the terms up to 100 terms (S10)?

9. Given that 3 couples are to be seated in a row such that husband and wife always seat together, find the number of ways they can be arranged?

1)sqrt(7/8)

2)??
3)A
4)20
5)???
6)500-(B+G)
7)B
8).....
9)12

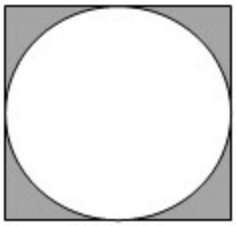
2)ab+cd is a chord of circle
lenth of chord is always less than lenth of diameter.
(ab+cd)/2 < diameter/2 = r
ANSWER B
Q. 1. r = sqrt (1 / (pi-2))

let radius be r, then the area of circle be pi*r^2.
In a square opposite sides can be calculated from 90-45-45 triangle,
diagonal length which is 2r, then sides be sqrt(2)*r

=> area of shaded region = pi*r^2 - 2*r^2
1 = r^2 (pi - 2)
=> r = sqrt (1 / (pi-2))

Quant:

1.



Given a figure of a square with a circle inscribed in it. If the area of the shaded region is 1, then find the area of the circle?
A. pi/4
B. pi
C. pi/(pi-4)
D.1/2(pi-4)
E. pi/(pi-4)^2
(Similar to this)

2. Given N = 10 power 22 + 1. If 'N' is divided by 11, then
Col A: The remainder
Col B: 2

3. Given M = 5 power k – 3; K>0
Col A: Units place of M
Col B: Tens place of M

4. A person 'J' travel speed is 35mph and 'A' travel speed is 60mph. If 'A' completes a distance in T hrs, then find the time taken for 'J' to travel the same distance as 'A'?
A. T/ (35)(60)
B. T (35)/ 60
C. 15 T/ 60
D. 60T/ 35
E. 60 * 35/ T

5. Find the value of (sqrt200 - sqrt2)/sqrt2?

6. In the set -14, -11, -7, 9, 10, 13, which of the following is true?
I. Median is greater than mean
II. Standard Deviation is greater than range
III. Mean is greater than median.
A. I only
B. II only
C. I and II only
D. I, II and III only
E. None of these

1)c [c-pi/(4-pi)]
2)c
3)d [if we put k=1, col A is greater, if we put k=2, both are equal]
4)d
5)9
6)a

Quant:

1. Given 1/x - 1/y = xy
Col A: y
Col B: x+1

2. What percent of 1/2 is 2/3?

3. An equilateral triangle with sides is given and in options rectangles with sides were given. We have to choose the rectangle whose area is equal area to triangle?
(Something like this)

4. Col A: 7^37 - 7^36
Col B: 6(7^6)^6

5. Find the interval of x, if xy is not equal to zero and x = 2y + 3?

6. If K, L and M are three prime numbers greater than 10, then
Col A: Number of factors of KLM and 1 inclusive
Col B: 8

7. Given a series 2, x, 7,..... In the following series, if every term is the addition of the preceding term and a constant, find the constant?

8. Given two cylinders A and B and if the cylinders A's radius and height are half that of cylinder B, then
Col A: Area of Cylinder A
Col B: 4(area of Cylinder B)

9. Given an equilateral triangle ABC of side 5. If the vertex A is at origin, B is at (0, 5) and C is in

the first quadrant, find the slope of BC?

10. If 5 < x < 1, then
Col A: x
Col B: 1/x

11. Given a - b = 2
Col A: 25^a/5^b
Col B: 5^a

12. Given w = 10^4 and 0 < x < 10^(-4). Find an approximate value of (w + x)/3w?

1. ????
2. 133%
3. ????
4. B
5. 7
6. B
7. 5/2
8. B
9. -25/43
10. A
11. A
12. 0.33 or 1/3

1) if this question is worded correctly than D would be answer
more likely RHS should be 1/xy

then C is correct

4) should be C
5) how did you get 7?

11) should be D

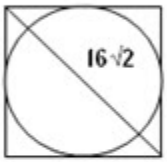
col a simplifies to 5^[2b+4-b]

colb is 5^(b+2)

if b is negative then B is a large negative value than B is greater
if b is positive A is greater

Quant:

1.



Given length of the diagonal of the square as 16√2, then find the radius of the circle?

2. Col A: [3 power (- 8)] - [3 power (- 9)] - [3 power (- 9)]
Col B: [3 power (- 9)]

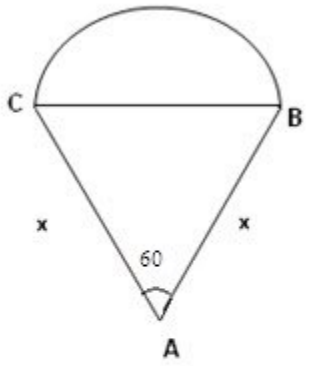
3. Given a figure of a right angled triangle with base x and height 2x. The area of the right angled triangle is also given and asked to find out the perimeter of the triangle?
A. 8 + sqrt(3)
B. 18+ 5 sqrt(3)
& so on……

4. Col A: 10% of sqrt (54372.19)
Col B: sqrt (5437.219)

5. Given m/n = n/r = 5/4.What can be the value of 'r'?

6. Col A: [1/(x) power (-2)] whole power (-3)
Col B: [1/x] whole power (-6)

7.



Given a semicircle drawn on a triangle as shown in the figure. If the circumference of circle is 16π, find the diameter of the semicircle?
(Similar to this)

8. Given mean of the sum as 'x' and standard deviation of the sum as 'y'. If the mean is increased by 2, then how much does the standard deviation change?
(Similar to this)

9. Given that three machines can produce one job of widgets in 4, 6 and 8 hours respectively. If three of the machines work on a single job, then what is the contribution of the fastest machine?

ans

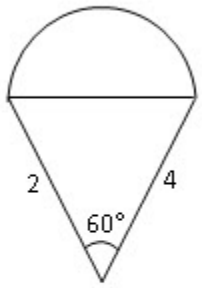
(1) 8
(2) C
(3) 3x + sqrt(5)* x whr x=sqrt(area)
(4) B
(5) r=(16/25)*m
(6) B
(7) 16
(????
(9) 2/9 of (24/13) hours

Quant:

1. Col A: sqrt [1 + sqrt {a + sqrt (2)}]
Col B: sqrt[sqrt(2) + sqrt{(sqrt(2) + 1) /sqrt(2)}]

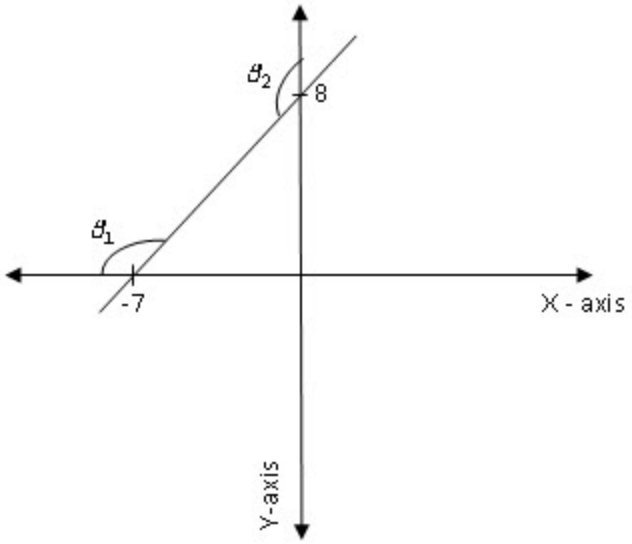
2. A person store 'T' pens. Of that he sells 135 pens at the cost of $0.25 each. At what cost should he sell the remaining pens to get the same amount?

3.



If the circumference of the semicircle is 50π, then find the radius of the circle?

4.



Col A: θ1
Col B: θ2

5. Given standard deviation of a set 'r' is 13 and of a set 't' is 7.
Col A: Mean of 'r'
Col B: Mean of 't'

6. Given an = a(n-1) – a(n-2), a1 = -5 and a2 = 4. Find the sum of first 100 terms?

7. Given that there are a total of 'n' sets of twins in a hospital. If 'b' is the set of only boy twins and 'g' is the set of only girl twins, then
Col A: The total number of boys
Col B: n – b + g

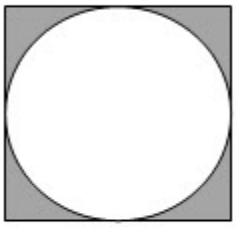
8. Find the value of [sqrt(100) – sqrt(8)] / sqrt(2) ?

9. Col A: Volume of a cube of surface area 150*y^2
Col B: 125*y^3

10. A tank consists of 'G' gallons of water. If the water fills at the rate of 'x' and leaks out at the rate of 'y'(y > x), then what is the time taken to empty half of the tank (G/2) in terms of x and y?

11. Given A, B and C as the three angles of a triangle. If A - B = 150 and B - C = 300, then find the value of angle A?

12.



If the area of the shaded region is 1 sq.cm, find the area of the circle?
A. pi/4
B. pi
C. pi / (pi - 4)
D. pi /(4 - pi)
& so on.....

13. Given a set s = {5, 6, 7, 8, 9}
Col A: The number of five digited numbers that can be formed using the digits from the set S
Col B: (5)(6)(7)(8)(9)

14. The value of |-7| + |3| - |10| is _____

15. The budget of a class trip is $'x' and each student was supposed to pay $'c'. Because of some inconvenience, 20% of them missed the trip, while the total budget remained the same. How much did it actually cost per head in terms of c?

16. Given a cube ABCDEFGH. If X and Y are the mid points of AB and CD respectively, find the area of the plane EGYX?

17. Given a line with x-intercept -7 and y-intercept 8.
Col A: Angle a (where a is the obtuse angle between the line & y-axis)
Col A: Angle b (where b is the obtuse angle between the line & x-axis)

18. Given an arc length of a circle as 'π' and its sector has an area of 3π /2. Find the radius of the circle?

19. Given |2x+3| < 7
Col A: x^2
Col B: 4

20. Given two sets S = {2, 4, 6} and T = {2, 4, 6, 8, 10, 12}. Find the number of values of set M, such that S is subset of M and M is subset of T?

21. Given two cylinders A and B, if the cylinder 'B' radius and height are half that of cylinder 'A', then
Col A: Area of Cylinder A
Col B: 4(Area of Cylinder B)

And many previous database questions appeared.

12)let side of square be a,
area of square will be a^2'
radius of circle will be a/2,
area of circle pi a^2/4,
area of square minus area of circle gives u shaded region(already given as 1)i.e a^2-pi a^2/4=1,
(4a^2-pi a^2)=4,
from here a^2= 4/4-pi,
then a=2/sqrt4-pi,
wkt r=a/2.so r=1/sqrt4-pi
then area of circle will be pir^2=pi/4-pi [/img]

1) if a=1 then answer is B, not really sure how to solve this one, you have to square it quite a few times

2) ?? need to know T

3) If by circumference of the semi-circle they include the bottom line then 50*pi=pi*r+2sqrt(3)

r=50-2*sqrt(3)
---
pi

4) B
5 D

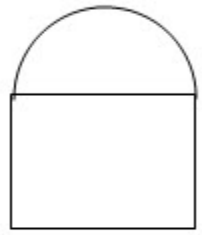
6 sum is 13
7) not enough info
8)5sqrt(2) -2
9 C

10 T= G

2(x-y)
11) ??? somehow A= 260 and B=110 but this can't be right for angles of a triangle

12) pi/(4-pi)
13) with repeats or without its still B
14 0
15 1.25c
16) need a picture
17 A opposite of number 4
18 radius =3
19) -5<x<2 so D
20) M has 5 or 4 values
21) C

Quant:
1.



As shown in the figure above, a semicircle is placed on a side of a square, such that the diameter of the circle is equal to side of the square. If the side length of the square is 5 units, then what is the perimeter of the figure?
(Similar to this)

2. Given a rectangular cuboid of dimensions 5 X 10 X 6 inches, if weight of the box is 17kgs then what is the density in cubic feet?

3. Another question is that in the options, the equations are given and we have to find the slope of that and have to find which line has the greatest slope?
(Something like this)

4. Given a series 1, 7, 13, 19, 23 ..... . What is the position of the number in the series that lies between 103 and 112
Col A: The position
Col B: 19
(Similar to this)

5. A sum of $2000 is given at the rate of 'r%' for 1year on simple interest and at the end of 1 year if $150 is the interest, then find value of r?

6. Given that 10 persons can watch a movie in 7 days. What is the probability that at least two of them watch on the same day?

7. Given that -10 < = x < = 10 and -11 < = y <= 11. What is the greatest possible value of y – x? (Similar to this)

1. 15+Pi*2.5
2. (17*12^3)/300 kg/ft^3
3. Use y=mx+c
4. I think the fifth term shud be 25.
So its C
5. 7.5%
6. I guess 1
7. -21<=y-x<=21
So its 21.

_____

1. 15+2.5(Pi)
2. (6*5*10)/(17*12*12*12) units
3. *****
4. 1,7,13,19,23,29,32,38,... this is d series but.. cant proceed furthur..
5. 7.5
6. 3/7
7. 21

) probability for at least two persons watch on the same day = 1 - probability of no two persons waching on same day

probability = 1 -0 = 1

[probability of no two persons waching on same day=0 ,because the number of persons are more than the number of days.]

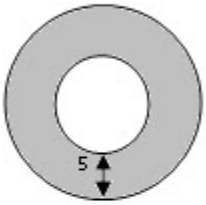
Quant:

1. Given t =m+1/2 and m >= 20.
Col A: t
Col B: some number (xx)

2. A box contains 10 bulbs, out of which 2 are defective. If 3 bulbs are chosen at random, then what is the probability of getting a non-defective blub?

3. In an Isosceles triangle STU, the sides ST= SU and 'p' is any point on UT and then which of the following might be true?
I. ST > PS
II. PU > ST
III. PS > PT
A. Only I
B. Only II
C. Only III
& so on ….

4.



Given a figure like above with two concentric circles and the gap between circles is 5 feet long. What is the ratio of area of bigger circle to smaller circle?
(Something like this)

5. Given a rectangular cuboid of dimensions 5 X 10 X 6 inches, if weight of the box is 17kgs then what is the density in cubic feet?
A. 20
B. 30
C. 40
D. 50
E. 60
(Something like this)

6. Col A: (a + b)^3
Col B: a^3 + b^3

7. Col A: Standard Deviation of d, d, d, d, d

Col B: Standard Deviation of d + 5, d + 5, d + 5, d + 5, d + 5

8. In the year 1997, the company has certain amount 'S'. In 1998, it is increased by r% and 1999 it is increased by r% again. Find the total amount after increase?
(Something like this)

And many previous database questions appeared.

1. ????
2. 7/15
3. A
4. (r+5)^2 : r^2
5. 2448/25
6. D
7. C
8.
In 1997 , S
In 1998 , [(r/100)*S]+S , let this amt be X
In 1999 , [(r/100)*X]+X

1. ??
   2. 1
   3. None of them. Apparently A may be true, but as P can be anywhere in UT it can be over U or T, in which case ST=SP.
   4. (R+5)/R
   5. 2448/25
   6. D
   7. C
   8. S(1+R/100)^2

can sum1 explain 5.
the ans for 6th shud be A coz
(a+b)^3=a^3+b^3+3ab^2+3ba^2
so itz definitely greater than a^3+b^3

Question 5 is not accurately delineated. I've solved the problem herewith for you to understand the logic.

Density is degree of compactness of a substance. Most likely, you will be given the relationship in the question, if not, do know Density = Mass/Volume.

Mass = 17 kg (given)

Volume = L x B x H (for cuboid)

Dimensions are given in inches, but the answer is sought in feet.

12 inches = 1 foot

So, Volume = (5 x 6 x 10)/(12)^3 = 0.17 (ft)^3 approx

Density = 17/0.17 = 100 kg/(ft)^3

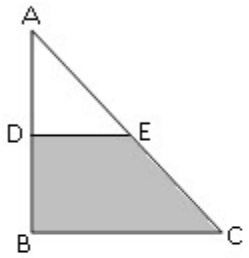
Do not worry that this is not in the answer choices above, because some questions on this website is half-baked.

Quant:

1. Col A: Standard Deviation of 10, 30, 50, 70, 90
Col B: Standard Deviation of 10, 45, 50, 75, 90

2. If N = 5^9 + 7^10, then
Col A: The least factor of 'N' greater than 1
Col B: 3
(Similar to this)

3.



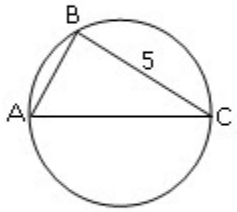
Given that 'D' is the midpoint of AB.
Col A: Area of triangle ABC
Col B: 3(Area of the quadrilateral BDEC)

4. Given s/t = 1.5

Col A: 2t
Col B: s/0.75

5. Given 150/4 > k^2 > 7/3.
Col A: Number of odd integers possible for the value of k
Col B: Number of even integers possible for the value of k

6.



Given AC is diameter, BC = 5 and area of triangle ABC as 5, then find the area of the circle? (Similar to this)

7. Given five numbers 50, 90, 110, 135, 147. Which of the following is not divisible by square of any positive integer?

8. Given y = 2x + 5 and x^2 = 4.
Col A: y
Col B: 3

9. Given average of 4 numbers as 'm' and average of 5 numbers as 'v'. Find the average of total 9 numbers?

10. There are certain events in which two persons compete and there is a trophy for each game. If one looses a game, he gives trophy to the other player and if he wins he gets 1 trophy. At the end, if one has won 4 games, then other has 8 more trophies than the number of trophies he had at the start, assuming there is no tie in any of the games, find the number of games they played? (Similar to this)

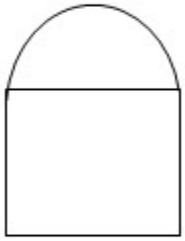
11. If the number of possible sets for choosing 4 things out of 6 things is 15, then find the possible number of sets for choosing 3 things out of 7?

12. Given initial ratio of men to total number of people in a team as 1: 3. If two women leave the team then the ratio becomes 2: 5. What is the total number of people in the team?
(Similar to this)

13. If the position of 5 in the number 5234 is denoted by [5*(10^n)], then what will be the value of n?

14. If |3x+2| = 8, then what would the value of x?

15.



Given a figure like above with the semicircle on the side of a square and the area of square is given as 1. Find the perimeter of the figure?

16. If 1 < y < 2 and 1 < xy < 4, then what would be the value of x?
Col A: x
Col B: 2

17. Three persons x, y and z altogether complete a work in 9 hours. If y and z together takes 12 hours to complete then x alone will take how much time to complete the same work?

18. Given X = {25, 26, 27, 28} and Y = {7, 8, 9, 10, 11}. How many distinct values can be produced by (x + y)?

1. A
2. B
3. C
4. C
5. B
6. 29Pi/4
7. 110
8. D
9. [4M+5V]/9
10. AND 11. PLEASE EXPLAIN
12. 16
13. 3
14. 2 OR -10/3
15. 3+(Pi/2)
16. D
17. 36
18. 8

ht of d rt angled triangle is 5 & itz area is also 5.
so area=(1/2)*b*h ==> 5=(1/2)*b*5 ==> b=2

now 3rd side of triangle is given by (5^2 + 2^2)^(1/2) = 29^(1/2)
dis is d diameter so radius will b itz half

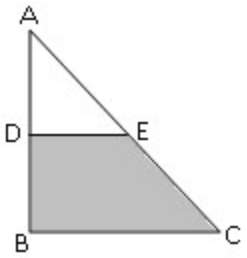
Area of circle= pi*r^2==>pi*29/4

2) if we see the result of both terms for 5^9 the result will be odd one and if we see for 7^10 the result will be odd if we add two odd terms we will get even number. as they asked the least factor that is greater than one .it is two beacause every even no is divisible by 2..(see that odd^odd is always odd,and odd^even is always even)
as in col B it is 3.. the greater value is 3 the ans is B

Quant:

1. Given that 37.5>k^2> 2.33. Find the value of k?
(Similar to this)

2.



D is mid point of AB and E is the mid point of AC.
Col A: 3(Area of triangle ADE)
Col B: Area of quadrilateral BDEC

3. Given x(x+5) =36
Col A: x
Col B: -4

4. If the ratio of volume of two cubes is 4/3, then
Col A: Ratio of edges
Col B: 4/3

5. Given that a point (1, 2) lie on the line mx + ky = 3.
Col A: k
Col B: 0

6. In a set of numbers from 1 to 10. If two numbers are to be selected from these 10 numbers with replacement, then what is the probability that at least one of them is even?

7. Given the arithmetic mean of 20 numbers is 12 and arithmetic mean of next 10 numbers is 6, what is the combined arithmetic mean?

1. +-(2 3 4 5 6)
2. C
3. D
4. B
5. D
6. 3/4
7. 10